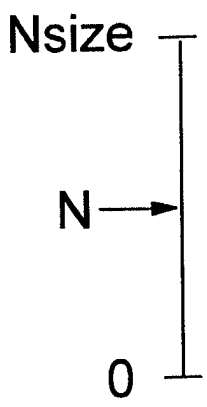
Figure 1



Nsize:

The size of the table that is used to manage the half-open connections

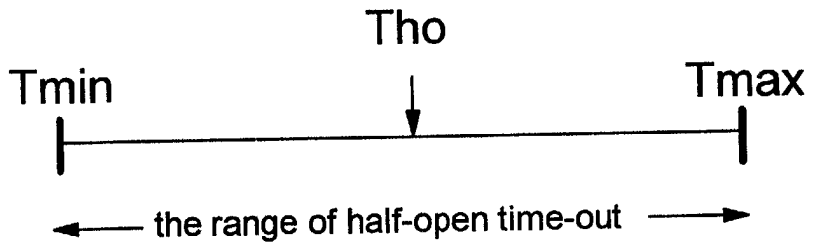
0:

Zero

N:

The current use of the table, i.e., the number of table entries used up.

Figure 2



Tho is the time-out used to manage half-open connections
Tmin is the minimum of Tho. This value is between 10 msec and 1 sec
Tmax is the maximum of Tho. This value is between 60 to 120 seconds

Figure 3

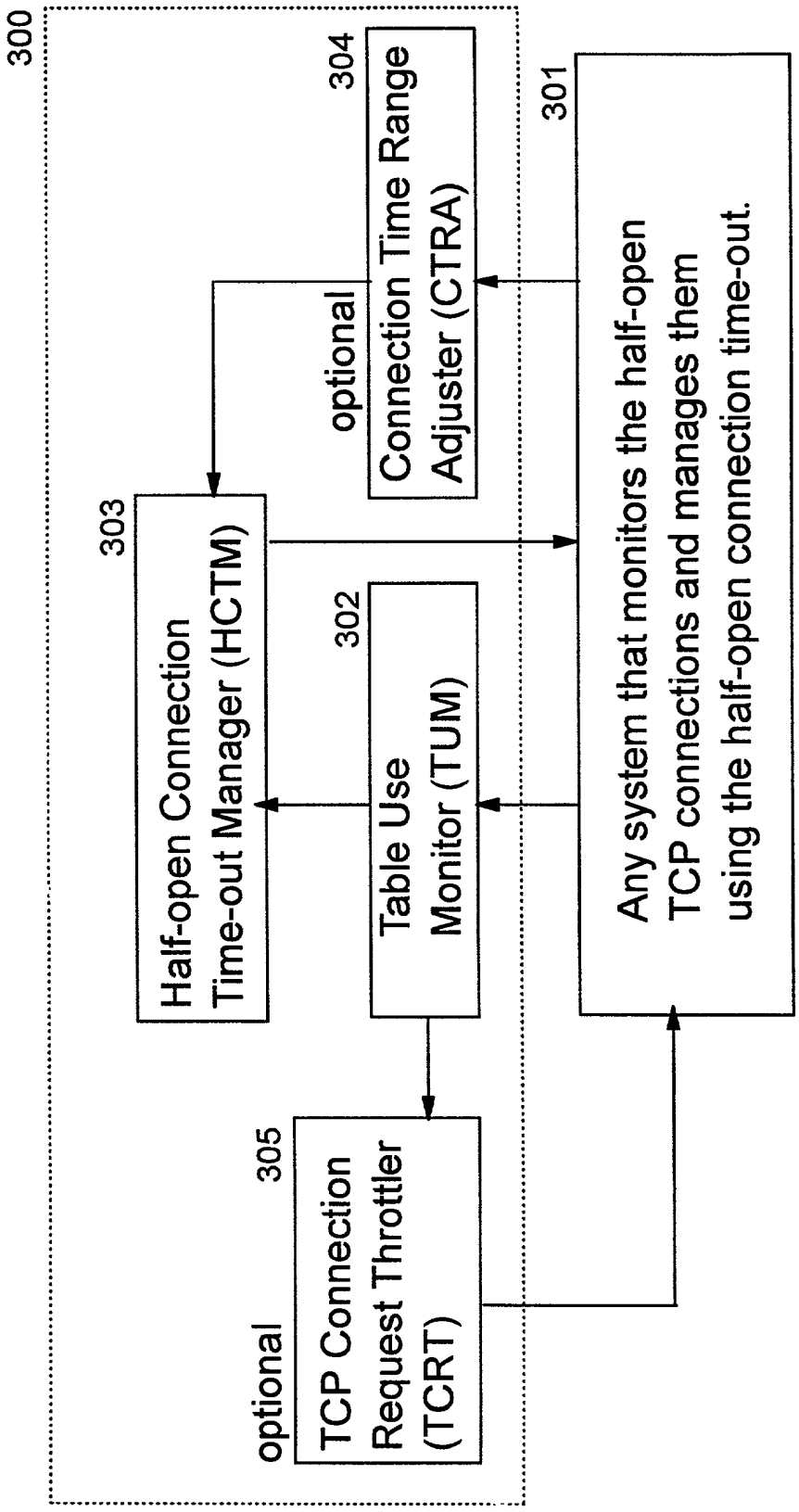
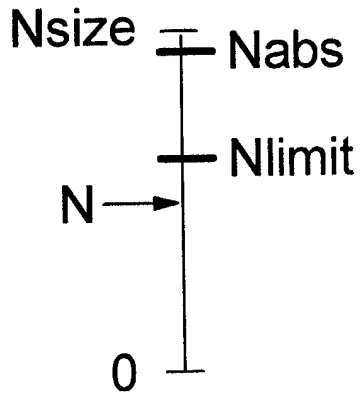

300
303
Half-open Connection Time-out Manager (HCTM)
302
Table Use Monitor (TUM)
305
optional
TCP Connection Request Throttler (TCRT)
304
optional
Connection Time Range Adjuster (CTRA)
301
Any system that monitors the half-open TCP connections and manages them using the half-open connection time-out.

Figure 4



Nlimit:
Indicating the number of safely usable entries in the table. This is between 0 and Nsize. A reasonable value range is between 50% and 90% of Nsize.

Nabs
Indicating the absolute bound. E.g., 99% of Nsize.

Algorithm HCTM1:

If N > Nabs then set Tho = Tmin
else If N > Nlimit then set Tho = max{Tmin, Tho/A}
else set Tho = min {Tmax, A*Tho}

where
A is called an "acceleration" parameter. A = 2 is a good example.

SCANNED, # 14

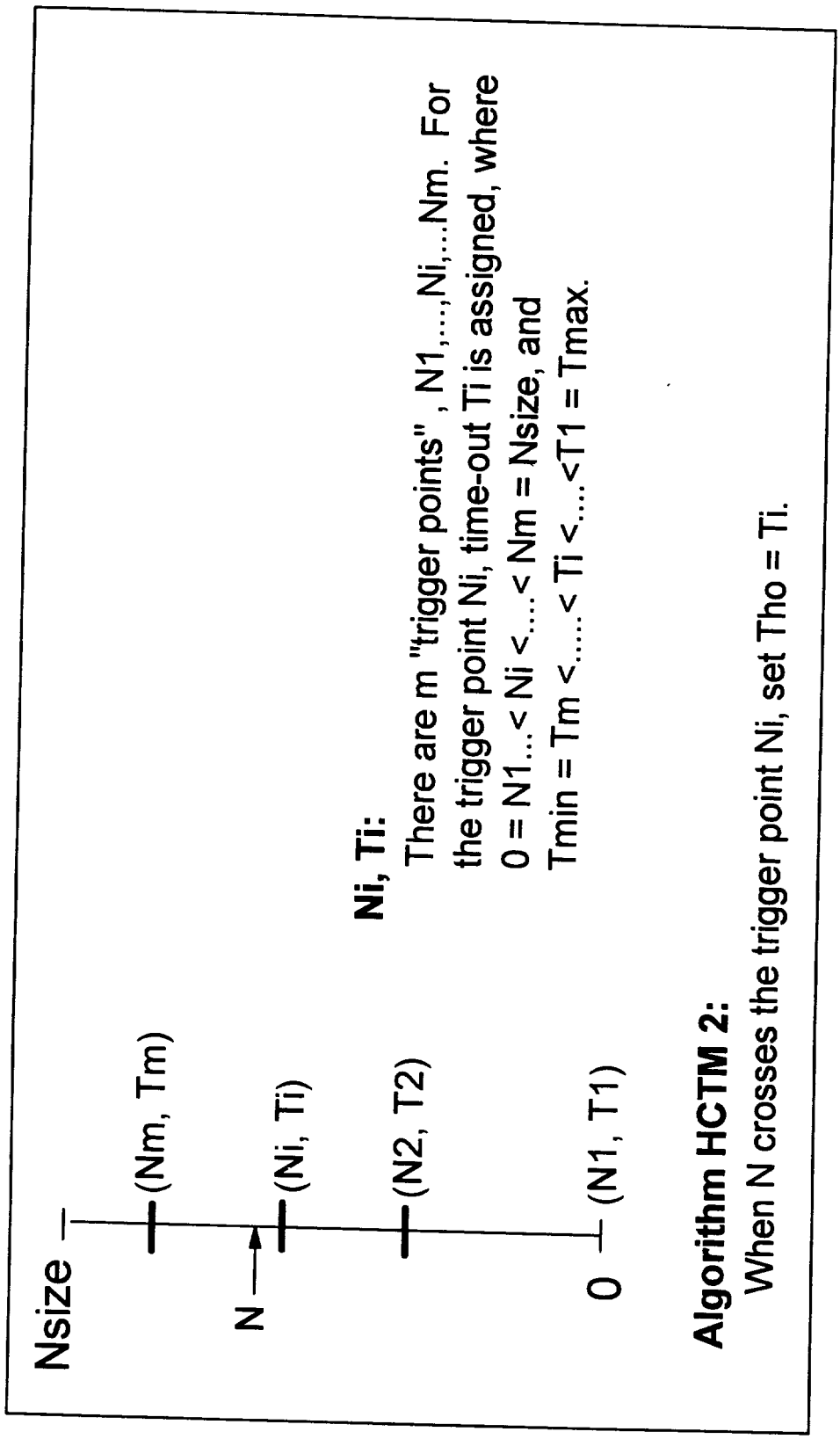



Figure 5